

THE DARPA Grand Challenge

A Historic Demonstration of Autonomous Robotic Vehicles

In March 2004, teams of leading innovators in a variety of fields will square off in a DARPA Grand Challenge, where autonomous robotic ground vehicles will navigate a route between Los Angeles and Las Vegas. DARPA will present a \$1 million cash award for technological achievement to the team that most quickly completes the course in less than the prescribed time.

The route will cover approximately 300 miles of off- and on-road terrain that will be cleared of interfering vehicles. Entries must be unmanned, autonomous ground vehicles capable of completing the entire route without external communication or human control. A series of waypoints will define the route, and vehicles will have maximum time limits to negotiate them. Additionally, checkpoint(s) will provide contestants with opportunities to autonomously service, repair and refuel their vehicles. Boundaries will define the route and vehicles that go outside them will be penalized.

The panel of judges will conduct a rigorous technical inspection of all the vehicles prior to the Challenge. Safety requirements for each team include a manned support vehicle and remote emergency stop capability. Vehicles that interfere with other entries will be disqualified.

For complete rules, please visit
<http://www.darpa.mil/grandchallenge/rules.htm>

About DARPA

The Defense Advanced Research Projects Agency (DARPA) is the central research and development organization for the U.S. Department of Defense (DoD). The Agency manages and directs selected basic and applied research and development projects for DoD, and pursues research and technology where risk and payoff are both very high and where success may provide dramatic advances for traditional military roles and missions.

DARPA is always looking for individuals to join its team of leading scientists and engineers. To find out more information about the possibilities, go to www.darpa.mil/hrd/join.htm.



Information:

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THE DARPA Grand Challenge

for Autonomous Robotic Ground Vehicles

**Leveraging
American Ingenuity
for our National Defense**



Las Vegas ★

★ Los Angeles

Robotic Technology

New Solutions for Saving Lives and Securing the World

As America navigates an era of unprecedented challenges to our national security, robotics technology offers great potential to help protect the men and women who defend our nation and our allies around the world.

Advancements in robotics have come from across the spectrum of American technology leaders, including academia, private laboratories, software companies, the entertainment industry, and defense contractors. Despite these efforts, progress has been hard won and major improvements are still required before robotics are fully ready for combat use.

The Defense Advanced Research Projects Agency (DARPA), the U.S. Department of Defense's central research and development agency, seeks to foster synergies between robotics innovators and other great thinkers to trigger breakthroughs in robotics that will enhance national security. DARPA is conducting a challenge of autonomous ground vehicles designed to accelerate their development for military applications.

"...[T]he army of unmanned vehicles is a tactical innovation that we're just beginning to explore.... [W]e're working on other capabilities that, when you couple them with the improvements of armed, unmanned vehicles, have the potential to change significantly the way we fight and perhaps even the nature of warfare itself."

Gen. Richard Myers,
Chairman of the Joint Chiefs of Staff

Help Make History

Join a Ground-Breaking Effort

The DARPA Grand Challenge promises to be a historic, high-profile event that will generate widespread interest and appeal to American creativity and innovation. Some of the brightest, most creative minds from a variety of backgrounds are already making plans to participate in this one-of-a-kind challenge.

Participants will play a vital role in helping to shape the future of America's national defense. Whether you're planning to enter or you're an interested observer, bookmark www.darpa.mil/grandchallenge as your one-stop source for information on the Grand Challenge; and feel free to email or call us with your questions and input.

Best and Brightest

A Call for Pioneers and Trailblazers

The Grand Challenge is open to ambitious Americans like you. DARPA's top priority is to tap the skills of a wide variety of participants and build capable teams consisting of:

- Advertisers and corporate sponsors
- Artificial intelligence developers
- Auto manufacturers and suppliers
- Computer programmers
- Defense contractors
- Futurists
- Inventors
- Motor sport enthusiasts
- Movie producers
- Off-road enthusiasts
- Remote-sensing developers
- Roboticists
- Science fiction writers
- Technology companies
- Universities
- Video game publishers
- Trailblazers of all kinds



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